

Defect Inspection

Garden Flat 44 Denning Road, London NW3 1SU

Report For: Stella Khan



Report by: Alaa A. BEng MSc C.Build E MCABE CEng MICE

Thursday 27th October 2022

INDEX

1.00 Building Description

2.00 Instructions

3.00 Observations & Analysis

1.0 Building Description

1.02 The subject property is a garden flat within an end of terrace Period-built converted dwelling.

1.03 The property has a front garden which can be accessed via a timber gate off Pilgrims Lane.

1.04 The building overall is conventionally constructed built using modern traditional materials & techniques. The main roof is timber framed, external facades solid wall construction and internal floor either timber or concrete. The partitions are generally a mix of solid walls and timber studwork.



Image courtesy of Google maps satellite imagery accessed Thursday 27th October 2022 online

2.0 Instructions

2.01 Our instruction was to inspect and comment on cracks to the front garden brick boundary wall facing Pilgrims Lane adjacent to the timber access gate. The boundary wall is leaning towards the front pavement and the wall is cracked local to where two large Lime trees are situated in the front garden.

2.02 Our report is limited in its scope to this task. We have not inspected parts or problems that are not relevant to this request.

2.03 This report is based on a visual examination of the property. The inspection did not involve any destructive testing or removal of the floorboards, floor, wall coverings or investigation of other inaccessible items. We are unable to confirm that such areas are free from defects at this time.

2.04 The report has been prepared in accordance with the addressee's request and therefore any liabilities which may arise are restricted to the addressee.

3.0 Observations & Analysis:

3.01 The property curtilage encompassing the front garden is known to be within an area whereby Tree Preservation Orders are in place covering the two front garden found large Lime species trees.

3.02 The aforementioned two large Lime trees in the front garden are causing the front boundary brick wall facing Pilgrim Lane to lean out towards the pavement beyond acceptable limits i.e. more than one third of the thickness of the wall measured at its base. This means that the wall is unstable and could suffer collapse on passers-by and users of the subject flats' front garden. Furthermore there are significant structural cracks in the boundary wall weakening the wall, wanting urgent remediation.

3.03 There is evidence of what appears to be direct mechanical action of the trees on the wall as well as indirect action of the tree roots on the soil volume i.e. tree root induced clay shrinkage subsidence.

3.04 To rebuild the wall would risk the same occurrence in future as the tree would continue to push on any newly built wall causing the same and the foundations would be significantly deep necessitating cutting through tree anchor roots destabilizing the tree risking injury to persons below.

3.05 To consider simple pollarding for a tree within 5.0m from a building or structure, according to the Kew Study for Trees, would likely entail removing the entire leafy area. In order to avoid rot and destabilisation of a degrading leafless stump, felling of the two Lime trees is advised.

3.06 Maximum tree-to damage distance recorded in the Kew survey was 30meters, with 50% of all cases occurring within 9.5metres. You should note that the front garden Lime trees are within such distance to the building and to heights such that their respective zones of influence encompass the boundary wall. You should note that according to the NHBC, trees of such moderate classification water demand have been known to exert their influence (on soil moisture content) over horizontal distance equivalent to 0.75 x the height of the tree. This comfortably puts the front boundary wall (if it were rebuilt) and the adjacent buildings in the zone of influence of the large problem trees.

3.07 P.G Biddle, states within his Arboricultural Advisory Information advice note 108/92 EXT: "If the movements are entirely seasonal, it may be possible to reduce the amplitude of this movement to an acceptable level by pruning the tree so as to remove leaf area ... greatest benefits will be achieved if the building is near the outer limits of influence, pruning a large tree which is only a few metres from the building will probably have little benefit ... if there is a significant persistent deficit, pruning alone will not be effective". On this basis and since the trees appear younger than the adjacent buildings and structures, I recommend felling the two Lime trees under guidance of a qualified tree specialist.

Appendix – Photos











